

**Claims:**

- 1.) A binding molecule which is capable of binding to the human NogoA polypeptide (SEQ ID NO: 5) or human NiG (SEQ ID NO: 7) or human NiG-D20 (SEQ ID NO: 24) or human NogoA\_623-640 (SEQ ID NO: 6) with a dissociation constant < 1000nM.
- 2.) A binding molecule which is capable of binding to the human NogoA polypeptide (SEQ ID NO: 5) or human NiG (SEQ ID NO: 7) or human NiG-D20 (SEQ ID NO: 24) or human NogoA\_623-640 (SEQ ID NO: 6) with a dissociation constant < 1000nM and comprises at least one antigen binding site, said antigen binding site comprising either
  - in sequence the hypervariable regions CDR1, CDR2, and CDR3, of which each of the hypervariable regions are at least 50% homologous to their equivalent hypervariable regions CDR1-11C7 (SEQ ID NO: 8), CDR2-11C7 (SEQ ID NO: 9) and CDR3-11C7 (SEQ ID NO: 10); or
  - in sequence the hypervariable regions CDR1', CDR2', and CDR3', of which each of the hypervariable regions are at least 50% homologous to their equivalent hypervariable regions CDR1'-11C7 (SEQ ID NO: 11), CDR2'-11C7 (SEQ ID NO: 12) and CDR3'-11C7 (SEQ ID NO: 13).
- 3.) A binding molecule which is capable of binding to the human NogoA polypeptide (SEQ ID NO: 5) or human NiG (SEQ ID NO: 7) or human NiG-D20 (SEQ ID NO: 24) or human NogoA\_623-640 (SEQ ID NO: 6) with a dissociation constant < 1000nM and comprises
  - a first antigen binding site comprising in sequence the hypervariable regions CDR1, CDR2, and CDR3, of which each of the hypervariable regions are at least 50% homologous to their equivalent hypervariable regions CDR1-11C7 (SEQ ID NO: 8), CDR2-11C7 (SEQ ID NO: 9) and CDR3-11C7 (SEQ ID NO: 10); and
  - a second antigen binding site comprising in sequence the hypervariable regions CDR1', CDR2', and CDR3', of which each of the hypervariable regions are at least 50% homologous to their equivalent hypervariable regions CDR1'-11C7 (SEQ ID NO: 11), CDR2'-11C7 (SEQ ID NO: 12) and CDR3'-11C7 (SEQ ID NO: 13).
- 4.) A binding molecule which comprises at least one antigen binding site, said antigen binding site comprising either

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- in sequence the hypervariable regions CDR1-11C7 (SEQ ID NO: 8), CDR2-11C7 (SEQ ID NO: 9) and CDR3-11C7 (SEQ ID NO: 10); or
  - in sequence the hypervariable regions CDR1'-11C7 (SEQ ID NO: 11), CDR2'-11C7 (SEQ ID NO: 12) and CDR3'-11C7 (SEQ ID NO: 13); or
  - direct equivalents thereof.
- 5.) A binding molecule comprising
- a first antigen binding site comprising in sequence the hypervariable regions CDR1-11C7 (SEQ ID NO: 8), CDR2-11C7 (SEQ ID NO: 9) and CDR3-11C7 (SEQ ID NO: 10); and
  - a second antigen binding site comprising in sequence the hypervariable regions CDR1'-11C7 (SEQ ID NO: 11), CDR2'-11C7 (SEQ ID NO: 12) and CDR3'-11C7 (SEQ ID NO: 13); or
  - direct equivalents thereof.
- 6.) The binding molecule according to claims 1 to 5 which comprises at least
- one immunoglobulin heavy chain or fragment thereof which comprises (i) a variable domain comprising in sequence the hypervariable regions regions CDR1-11C7 (SEQ ID NO: 8), CDR2-11C7 (SEQ ID NO: 9) and CDR3-11C7 (SEQ ID NO: 10) and (ii) the constant part or fragment thereof of a human heavy chain; and
  - one immunoglobulin light chain or fragment thereof which comprises (i) a variable domain comprising in sequence the hypervariable regions CDR1'-11C7 (SEQ ID NO: 11), CDR2'-11C7 (SEQ ID NO: 12) and CDR3'-11C7 (SEQ ID NO: 13) and (ii) the constant part or fragment thereof of a human light chain; or
  - direct equivalents thereof.
7. The binding molecule according to claim 6 in which the constant part or fragment thereof of the human heavy chain is of the  $\gamma 4$  type and the constant part or fragment thereof of the human light chain is of the  $\kappa$  type.
8. The binding molecule according to claims 1 to 7, which is a chimeric or humanised monoclonal antibody.

9. A binding molecule comprising polypeptide sequences as shown in SEQ ID NO: 2 and SEQ ID NO: 3.
10. A polynucleotide comprising polynucleotides encoding a binding molecule according to any of claims 1 to 9.
11. A polynucleotide comprising either
  - polynucleotide sequences as shown in SEQ ID NO: 14, SEQ ID NO: 15 and SEQ ID NO: 16; or
  - polynucleotide sequences as shown in SEQ ID NO: 17, SEQ ID NO: 18 and SEQ ID NO: 19.
12. An expression vector comprising polynucleotides according to any one of claims 10 or 11.
13. An expression system comprising a polynucleotide according to any one of claims 10 or 11, wherein said expression system or part thereof is capable of producing a polypeptide of any one of claims 1 to 9, when said expression system or part thereof is present in a compatible host cell.
14. An isolated host cell which comprises an expression system according to claim 13.
15. The use of a binding molecule according to any one of claims 1 to 9 as a pharmaceutical.
16. The use of a binding molecule according to any one of claims 1 to 9 in the treatment of nerve repair.
17. A pharmaceutical composition comprising a binding molecule according to any one of claims 1 to 9 in association with at least one pharmaceutically acceptable carrier or diluent.

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18. A method of treatment of diseases associated with nerve repair comprising administering to a subject in need of such treatment an effective amount of a binding molecule according to any one of claims 1 to 9.